# Spaces for the Poor

# Working with Communities and Commonlands in Central Aravalis, Rajasthan

Foundation for Ecological Security

# Spaces for the Poor

Working with Communities and Commonlands in Central Aravalis, Rajasthan

**Foundation for Ecological Security** 

# Contents

Outline and	d Purpose of the Paper	1
Section I	Overview: Project Experience, Issues and Interventions	3
Section II	Village Case Studies	10
Section III	Emerging Trends and Issues: Common lands Development in Central Aravalis	23
	nds and Issues: Development, Livelihoods, cological Concerns	27



FES has more than a decade's experience in common lands development work undertaken in the central Aravali region. The **purpose of this Paper** is twofold. **Firstly**, to critically examine the project experience derived from the work done, the immediate outcomes, the problems and issues confronted, the mistakes committed and the interventions made to correct them. **Secondly**, to review project experience in common lands development in central Aravalis in the larger context of emerging issues and concerns surrounding sustainability and equity. **The Paper is an output of the efforts of the FES project teams** that worked in Ajmer, Dausa and Jaipur districts of Rajasthan and deals with the work done from the 1990s till 2002.

The exercise besides correcting mistakes in the projects, has contributed to capacity building of the FES staff by enabling them to link up their specific project understanding with the concerns of village institution development within a larger context. It has helped in reviewing weak areas in the existing institutional structure of TGCS and alerted us to general and specific problems of sustainability and equity surrounding common property management.

For the **purpose** of **policy advocacy and more focused programme interventions** in the future, the experience of common lands work in central Aravalis needs to be placed on strong foundations of analysis and peer review. This Paper has attempted to do the same from its past experience and intends to continue it forward in the years to come.

#### The Paper is divided into three sections.

The **first section** consists of a brief overview of the work done through the Tree Growers' Cooperative Societies (TGCS), under the earlier organizational structure of FES. The overview details the project experiences including the outcomes, the internal review processes that led to an organizational restructuring and programming focus within FES, as well as a review of the Ajmer and Jaipur projects.

### Spaces for the Poor

The **second section** consists of a set of **six case studies of villages** where TGCS projects were implemented in the 1990s. This section documents the experience of TGCS formation, achievements, problems and issues in specific relation to each village.

The **final section** on **Emerging Trends and Issues** captures some generalizations regarding important trends observed during the project implementation in the 1990s.

## Section I Overview: Project experience, issues and interventions

The Project districts are situated in the centre of Rajasthan State between 25° 38' and 26° 58' north latitudes and 73° 54' and 75° 22' east longitudes. The project area is spread over Ajmer, Jaipur and Dausa districts in central Rajasthan that are predominantly semi-arid with low and erratic rainfall averaging 520 mm annually. Only 5-6% of the total geographical area is forested with sparse vegetation and species diversity. Sandy and saline soils predominate.

The region is drought prone and in the last four years (1999-2002) the project area has witnessed deficient rainfall with a severe drought in 2002 measuring 40% less rainfall than usual. Agricultural productivity is moderate and in good rainfall years farmers manage to harvest two crops- jowar, bajra, pulses, groundnut in Kharif and wheat, barley, mustard, gram in Rabi. Animal husbandry is an important source of livelihood. In summer the owners of large herds of sheep/goat migrate with their animals to neighbouring states in search of fodder and water for about 3-4 months. In drought years even owners of cows/buffaloes migrate.

The villages are caste heterogeneous and stratified on the basis of class and resource ownership. The disconnected scattered mosaic of selected villages for Tree Growers Cooperatives represents the earliest interventions of FES (at that time called NTGCF) when the availability of patches of wastelands for lease to TGCS was a major constraint in choosing project villages. This often led to selection of scattered villages with little interlinked physical or social context.

#### **Project Outcomes**

The projects in central Aravalis were initiated in 1987 under a NDDB funded pilot project aimed at membership-based Tree Grower's Cooperatives similar in pattern to Anand Milk Cooperatives. It was implemented with financial assistance from the Swedish International Development Authority (SIDA) from 1991. Of the total 3136 villages in

Ajmer, Jaipur and Dausa districts, TGCS were organized in 139 villages. The team was unable to work in other villages since common land had either been encroached upon or was not available to TGCS due to technical and bureaucratic delays orthe land holding was too small to engender collective action.

One of the major outcomes of the Tree Growers' Cooperative Projects has been the securing of tenure rights on 2095ha of wasteland that would otherwise have been encroached upon by a few powerful people of the village.

The other positive outcomes were:

- ★ Regeneration of degraded land
- Creation of employment opportunities (365,549 wage days were created and 65% was availed of by women)
- Improvement in common lands productivity (productivity of grass increased from 0.5mt/ha/yr to 3 to 4.5mt/ha/yr availability of tree fodder, fuel wood, legumes and thatching material).

There were also indirect benefits in the form of improvement in soil fertility and moisture retention (the moisture retention is estimated to be about 16 lakh liters/ha/yr assuming an average, at least 40% additional moisture conservation due to SWC work), checking of soil erosion, succession of secondary species and provision of safe shelter for wildlife (blue bull, rabbit, jackals and relevant, snakes, many birds). Some of these ecological benefits are hard to quantify and benchmarks from any formal research organization are also not available.

#### Internal Review Process in FES

No other single NGO in the central Aravalis besides FES has organised so many common lands development projects and undertaken work on such a large scale during the 1980s and the 1990s. The performance of the TGCS was not uniform. It was therefore felt necessary to review the experience gained in the formation and working of TGCS and to examine mistakes. During the **Shared Vision exercise in 1996**, we looked back together with inputs from community, staff, friends and donors. The purpose of such an exercise was to collect the learning across the project area and bring it to a common platform and see where we were and where we want to go. This exercise helped in reworking the organizational strategy and resulted in the transformation of National Tree Growers Cooperative (NTGCF) into the Foundation for Ecological Security (FES). This later led to a reformulation of project strategies everywhere including Rajasthan.

<b>Findings</b>	of	the	1996	<b>FES</b>	review	exercise
-----------------	----	-----	------	------------	--------	----------

Elements of Project	Pre-Shared Vision Phase (1988-96)	Post-Shared Vision Phase (1997- 2002)
Institution	Tree Growers' Coop. Society	All forms of Vies
Land	Revenue Wasteland	All categories of common land (RWL, Forest, Grazing)
Resource	Land	Land and water
Land size	40 ha isolated	Contiguous, eco-perspective
Mode	Implementation	Facilitation
Diversity	Plantation, monoculture	Mixed species, natural regeneration, seeding
Approach	Commercialization	Conservation
Stage	Effectiveness	Efficiency
Organization	Implementation	Documentation, research
Project plan based	Blue print, top-to-down	Need based, perspective

#### **The Review Process**

During 1997-99, reviews of projects in Rajasthan were undertaken by teams constituted from two categories of FES staff. These included people who were associated in the implementation stage as well as those who had not participated in it. The purpose was to get a better understanding of the social, economic and institutional environment of the projects as well as to identify weak and strong elements of the project from both the resources and institutional aspects of the project villages. It helped in opening up a rich debate within FES with a mixed team of staff from technical and social background on various issues. In this exercise the older TGCSs were studied systematically. A review of all the 139 societies was done.

During the internal review exercise in FES, **critical social and institutional issues determining TGCS performance** in Rajasthan were studied in great detail and were debated upon. This included examining the following:

- Specific aspects of inclusion and exclusion (with special reference to caste and gender)
- → Transparency in decision-making
- ★ Equality in access and control
- ★ Accountability of leaderships
- → Democratic decision-making
- → Ownership and membership

- ★ Self-governing rules and sanctions in traditional institutions
- ★ Conflict resolution
- → Managing other natural resources
- ✦ Social audit
- → Sustainability
- ★ Environmental awareness and
- → Significance of developed TGCS on local livelihoods.

**In-depth village case studies were simultaneously undertaken**. This process helped in an internal review of the potential and problems existing in villages. It helped to identify those villages where FES could work towards investing efforts to secure positive outcomes.

#### **Outcomes of the Review**

**Two problems** were identified from the TGCS experience that had a fundamental bearing with the sustainability and equity considerations of the common lands. These were the **Governance and Rights issues** relating to common lands management.

The **Governance** issue dealt with the formal/legal Cooperative structure of TGCS, the restricted membership of TGCS and the absolute powers of the Management Committee that is traditionally dominated by the village elite. FES was forced to look afresh at alternative means to bring greater ownership and accountability to the village institution.

The **Rights** issues arose from problems of restricted access to the developed common lands and exclusion from participation, of the vulnerable and marginal sections of the local village community. FES realized that without the rights of the marginal communities getting addressed, the project intervention could not be justified or even sustained in a peaceful manner for long.

#### Specific Issues

→ The TGCS is a cooperative entity namely, a voluntary registered association of individuals for an economic activity. In the case of common lands development where land belongs to the whole village and sometimes to traditional users within and outside the boundaries of a revenue village, the rigid definition of Cooperative byelaws discriminate against non-members, disregard traditional rights and require the services of a secretary and a formal audit. Thus the traditional practice of unconditional access to common lands by all communities was discontinued. Initially nobody in the village objected to this arrangement because a) TGCS had stopped encroachment of the commons, b) the productivity of the degraded commons was enhancedand c) there was availability of wage

employment in the first few years. However, once the project delivered its promise of increased biomass and wage employment ceased, the problems began to arise.

- → The small livestock owners and the poor were excluded from the benefits of developed common lands and these benefits were usurped by a few. This happened due to the practice of protecting the commons from grazing of small livestock (goat and sheep but not large bovines like cattle and buffaloes) for the first 5 years and the owners of the small livestock were usually the marginal and lower sub castes. Benefit distribution mechanism such as auction, by its very nature, excluded the poor. These contributed to a de-facto privatization of the commons.
- → Increased inter and intra village conflicts arose, either due to caste divisions or due to electoral politics. The conflictsrevolved around the common lands, with issues of access and control over common lands becoming a rallying point between the contending parties. This often resulted in damaging consequences for the developed common lands and to the local institution (TGCS).
- → The elite of the village dominated the decision-making on the managing committee of the TGCS and thereby deprived representation of the marginal sections of the village (which included smaller hamlets, social under castes and women) in the management of TGCS.

The problems observed in TGCS governance and management could have been due to the hierarchical socio-economic relations that existed in the area or could have resulted from the implementation of the project or due to a combination of both. It became imperative for the team to acknowledge responsibility and to try and reduce conflict, tension and inequalities to the extent possible.

#### Remedial Measures

FES was conscious of the challenge in addressing the emerging problems that threatened to undo the physical achievements of the TGCS in terms of developed common lands and its contribution to the livelihoods of the local community in Rajasthan. The Ajmer SHT was given the responsibility to draft a strategy for an intervention to improve governance and ensure fulfillment of rights of the excluded stakeholders in the period 1999 to 2002.

Two distinct yet closely interrelated elements of the strategy were to:

1) Broaden the structural spaces so as to make TGCS a more inclusive institution, and

2) Push for, a representative decision making process as well as a produce sharing system that did not discriminate against the poorest sections.

**Structural improvements** were directed to include all households from traditional user groups in the TGCS so as to ensure legal ownership of all, to include women and to make the composition of the management committee representative of various conflicting and competing interests. Three years ago, the average membership in TGCSs was 50% of the traditional user-group households in Ajmer district and 80% in Jaipur and Dausa districts.

The FES team made conscious efforts to ensure that the TGCS included all households as members of the village cooperative. This would ensure legal ownership on leased land and would provide opportunities for the disadvantaged groups to be included in the management committee and thus influence decisions relating to governance and benefit sharing. This was made possible by taking into confidence the management committee members and caste leaders and sensitizing them to include the left-out households as members. At the same time, the FES team went from door-to-door to inform the marginalised households of their rights and responsibilities and to convince them to join.

To **improve the decision making process**, efforts were made to systematically establish the supremacy of the General Body of the TGCS and redefine the role of the management committee by making it responsible to the General Body for all decisions. In many villages management committees were restructured and expanded beyond nine members so as to accommodate representatives from all castes, classes and user communities. The General Body preferably included all members of traditional user groups and weaker sections who were otherwise deprived. Efforts were made to put all matters of importance, including financial issues, before the whole village for discussion, ratification and approval. Many rounds of discussion took place in villages for laying down a minimum set of principles of community ownership, transparency, equal sharing of benefits etc. that would govern and guide TGCS functioning, irrespective of the enrollment or the restrictive cooperative bye-laws.

#### Results of Remedial Measures

- → In many villages TGCS, plots were selectively opened up for controlled grazing for all livestock including the small animals sheep/goats.
- → Most of the TGCSs shifted from, auctioning the produce to the highest bidder, to a system of sharing by all the villagers, irrespective of membership.

- → There was a shift in the approach, from the exclusive focus on ensuring financial viability of the TGCS through unrestricted sale of fodder and imposing fines, to a nominal price for grazing so as to meet the recurring cost of watch and ward. This pricing regulation (on the lower side) has enabled the poor and weaker sections and traditional user groups to avail of benefits in the form of fodder and fuel wood.
- → Decision-making was decentralized. In many TGCSs, resolutions have been passed in Gram Sabhas which state that after keeping aside a part of the fund for meeting annual recurring expenses, the balance amount should be spent for common purposes such as digging wells, provide drinking water to humans and animals, repairing school buildings etc.



This section contains brief **case studies of six villages** of TGCS in central Aravalis. These case studies document the village background, the initial project interventions in the early 1990s including the outcomes in terms of developed common lands, the problems and issues that emerged thereafter in equity and sustainability and finally, how FES intervened to resolve these problems. The corrective interventions by FES took place during 1999 to 2002.

#### **Bhatiyani TGCS**

Bhatiyani village is situated on the Ajmer-Bhilwara state highway. This multi-caste village is inhabited by 366 families and has a total population of 3125. The caste composition studied shows 17 general caste, 254 Other Backward Caste (OBC), 85 scheduled caste(SC) and 10 scheduled tribe (ST) families.

Rain fed agriculture, followed by dairying and animal husbandry, are the main sources of livelihood. The village has an animal population consisting of 1881 cows and buffaloes, and 2468 sheep and goats, which show that animal husbandry is an important source of livelihood. The major Kharif crops are bajra, jowar and pulses while Rabi crops are wheat, barley and gram.

The total geographical area of the village is 2352 ha out of which 1025 ha is Revenue wasteland, 170 ha grazing land and the balance1157 ha is private land. The village has a big pond, three small ponds and 207 private wells. The crop failure for the past three years has resulted in an acute shortage of fodder, water and food grains. A section of the shepherd community migrates every year to the neighbouring states (for 3-4 months in summer) in search of fodder and water. This migration period is prolonged in drought years.

#### Initial Project Interventions and Outcomes

A TGCS was formed in 1991 with the objective of regenerating the degraded commons so as to meet fodder and fuel wood needs. Fifty percent of the families in the village enrolled as formal members. A 9-member Managing Committee (MC) was the decision making body of TGCS. It was constituted through an informal election process in an open meeting in the village.

The community put in considerable efforts to create a good plantation in 38.5 ha. of leased land with a suitable mix of fodder tree, grass and shrub species. Around 41,625 saplings were planted and at present 32,480 trees have survived. Due to proper protection for over a decade, the planted saplings and natural rootstocks have grown significantly and grass production has also gone up to 4 mt./ha./yr. as compared to 0.5mt earlier. The TGCS set up mechanisms for sharing of grass, such as cut and carry in initial years, followed by regulated grazing for a couple of months in post monsoon period (pricing decided per animal basis). The surplus income generated from sharing of grass, after utilising a part for meeting recurring expenses, is accumulated over the years as TGCS fund.

#### Issues

During the initial five years, the TGCS site was fully protected and small animals(sheep/goat) were not allowed to graze. At the same time, the communityof small animal owners was given an assurances that small animals would be allowed to graze in the site after five years. Initially, there was no objection in the village to this arrangement for protection and fodder sharing.

However, during the elections to the panchayats in 1997, there was intense political rivalry or wresting control of the TGCS Management committee. Two rival political groups emerged within the village. The aspiring political leaders tried to establish their control over TGCS and, in a bid to demonstrate that they had the backing of a large section of the villagers, allowed indiscriminate grazing thereby damaging a large part of the TGCS developed common lands. A few individuals, who owned large herds of sheep and goats also used this opportunity and grazed their animals in the TGCS plot. This resulted in friction amongst the members of the Managing Committee of TGCS, and some of the TGCS members resigned. The protection system for the common lands collapsed, tree felling took place and attempts at stone quarrying also took place.

#### Remedial Measures

For any institution to be self-sustaining in the long run, **inclusion and participation** of all families residing within the boundary of the institution is vital. FES tried to broaden the participation through increased membership. Various strategies were

employed towards this end, like accommodating all left out families as formal members of TGCS, using personal contacts and persuasion with non-member families, motivating caste leaders and management committee members to involve the larger, more vulnerable and poor sections. As a result the membership **went up to include 90%** of the households.

For **fair governance**, establishing the rule of collective choice is important. The users affected by the decisions should have the right to frame and modify rules. The team conducted a series of group meetings with various stake holders/users and tried to analyze the failure of the governance system. It was felt that an important reason for weak governance was the exclusion of users/ stakeholders in the decision making process. Therefore, the **management committee was reconstituted** with representation from all castes and user sections.

The failure of the protection system and illegal felling of trees was discussed in village meetings at length. The community realized their mistakes and decided to reestablish the governance system. With some persuasion from the FES team, the village community agreed that small ruminates (sheep/goat) have greater dependency on village commons and agreed to provide them access to the TGCS site for grazing. The price was also kept low (Rs.5/ per big ruminant and Rs2/- for small ruminant) so as to allow the poorer sections to avail of fodder. This resulted in better social harmony and a feeling of ownership towards the village institution.

#### Local Conflict Resolution

It was decided that the village Gram Sabha would be the authority to decide and settle, in an open transparent manner, all important matters conflicts and disputes arising out of TGCS. No further rules were outlined, as it was a common practice within the village to follow certain social sanctions and fines depending upon the gravity of the misconduct. The villagers who violated TGCS rules would be fined in line with the traditional system of Rs300 per family for illegal tree felling and Rs.7500 for quarrying. The management committee was made accountable to execute the decisions taken by the Gram Sabha. A portion of the fine amount of Rs.5000 was to be kept aside for purchase of grains to feed pigeons (this is a traditional system wherein villagers contribute grain to feed pigeons on a common place called "Kabootar Khana" every day at sunrise).

For the last couple of years the villagers are managing their affairs without depending on the team and have shown signs of ecological, social and financial sustainability.

#### **Pingun TGCS**

The village Pingun is situated in Dudu tehsil of Jaipur district. This multi-caste village with 97 households is mainly dominated by Jats (31) and Gurjars (39). Other castes

include 9 SC, 6 ST and 12 general caste families. Land use shows that there are 45 marginal, 32 small and 20 big farmers.

The total geographical area is 536 ha. with 361 ha. of private land, 69 ha. of revenue wasteland and 105 ha. of grazing land. The land quality is moderately saline and ground water in 50 privately owned wells is also saltish. The village has two small nadis meant for animals.

Rain fed agriculture is the main source of livelihood. Dairying and animal husbandry are important sources of income. Cattle population ratio is 1: 3 of big and small ruminants. The shepherd community depends a lot on the village commons for supporting their livestock.

The SC and ST communities also depend on sheep and goat rearing (and hence graze for most of the period on the village commons) for their livelihood. During the season, they are employed as agricultural labourers. There is a long history of conflict between the Jats and Gurjars, possibly arising out of their different, and sometimes conflicting, livelihoods (agriculture vs. grazing). Since the village commons are less productive, the shepherd community faces acute shortage of fodder in the dry periods of the year and migrates in search of fodder and water to the neighboring states.

#### Initial Project Interventions and Results

Small land holding farmers in India have an understandable thirst for acquiring more land. Since the available land is limited, encroachment of common lands and government lands is a regular problem. The government policy of regularizing encroachments has encouraged this problem.

Pinguin village has relatively good quality of common lands and hence the desire to protect this common land from encroachment and to develop it further was a major incentive for the formation of the TGCS in 1992. Thus 29.5 ha. of revenue wasteland was leased to the TGCS. Membership was high from the beginning with 95% of the households enrolled as formal members of the Society. In spite of the best efforts to regenerate common lands, the regenerated plant growth has been poor due to sandy soil and termite attacks. Nevertheless, due to soil and water conservation and seeding of enriched grass species, the grass production has gone up to 4.5mt./ ha./yr. from 1mt./ha./yr. The regenerated land supports around 2 months of the fodder need of animals in normal rainfall years.

#### **Issues**

The decisions relating to TGCS operation including protection, period of grazing, pricing of the produce, sanctions for violation of rules, utilization of village funds,

etc. was taken by the nine-member management committee (dominated by Jats). The decision making process was not broad based and transparent. Exclusion of the large Gurjar community resulted in the prevention of grazing of small livestock, even though there were not many trees that could have been damaged by allowing grazing of sheep/goats. This created resentment among the Gurjar community and they forcefully allowed animals to graze on TGCS plot. The Management committee did not give any opportunity to discuss this matter in the general body or to resolve it through mutual agreements. The TGCS retaliated by lodging an FIR in the near by police station and a few members of the shepherd families were arrested. The governance system of the TGCS collapsed.

The police exploited the situation and pressurized the villagers (the ones who got arrested) to pay money to close the case. This incident humiliated the Gurjar community further and widened the gap between Jats and Gurjars. In this caste rivalry, a few innocent SC and ST families also suffered. The effect of caste rivalry hampered other village development works like the upgrading the primary school to middle school, providing electricity connection, conducting the regular business of the Dairy Cooperative. Society etc. Pinguin Dairy Cooperative was a model dairy of Jaipur.

#### Remedial Measures

The team studied and analyzed the situation and conducted a series of discussions with each of the warring groups. It was found that the villagers were unhappy with the leadership of TGCS and they demanded reconstitution of the Managing Committee of the TGCS with more representative, credible and acceptable leaders. The management committee was restructured and had appropriate representation of Gurjar and SC/ST communities. Decisions on all important matters is now being taken by the Gram Sabha The General body has framed rules and regulations relating to protection and management of common lands, pricing of produce and period of grazing, fund use for common cause etc. The fodder distribution system was revised on a per cattle head basis and the price was kept low (Rs. 10/- per cow/buffalo and Rs. 5/- per sheep/goat) so as to provide fodder to all needy families. Small ruminants got access to grazing on TGCS plot.

The new management committee also took the initiative to bring together both the parties involved in the dispute to resolve it through mutual agreements and to withdraw the case. (however, till date the case had not been withdrawn).

The improved governance restored the faith of both communities to a large extent and the mechanisms and processes have been put in place. Accessibility to resources and participation of the shepherd, SC and ST communities in the governance have

normalized the situation to a great extent. For last three years, villagers are able to take timely decisions without external support.

#### **Nalu TGCS**

Nalu village is situated in Kishangarh tehsil of Ajmer districts, 50 kames. away from Ajmer city, towards NH-8 on the Ajmer-Jaipur road. This 314 household village comprises mainly of people belonging to Jat (74), Mali (45), Gurjar (35), Brahmin (10), Rajput (45) and SC (59) communities.

The major livelihood sources are agriculture, followed by dairying and sheep/goat rearing. The cattle population comprises of 603 big ruminants and 3438 small ruminants. Agriculture is largely rain fed and 11% of the cropland is irrigated through private wells. Since animal husbandry is an important source of livelihood, especially in the drought years, the need for fodder and water is more. The village has a substantial amount of common land- 200 ha of revenue wasteland and 300 ha of village grazing land.

This is a relatively more developed village with good infrastructure like pucca road, electricity, Dairy Co-operative Society, Gram Panchayat; Sub-Post Office, Middle School, Primary Ayurvedic Dispensary and a sub-centre of a reputed local NGO called the Social Work and Research Center, Tilonia, (SWRC).

#### Initial Project Interventions and Results

A part of the village commons i.e. 50 ha. of grazing land was developed by Social Work and Research Centre (SWRC) a few years prior to the TGCS work. The villagers were concerned that the common land was under threat of encroachment and that very little would be left for grazing of livestock. The fodder yield in the common land was very low and therefore the villagers approached FES to support them in regenerating 50ha of common land.

The Nalu Tree Growers' Co-operative Society (TGCS) was organised in 1992. At the time of registration of TGCS, 108 families were enrolled as members, which has now increased to 187 (26 SC, 2 ST, 116 OBC, 43 general). The TGCS took posses session of the leased wasteland in two phases, 25 ha. in 1992 and 13.4 ha. in 1994. Soil and water conservation as well as plantation was also undertaken in two phases.

Enthusiastic work by the community has resulted in good quality soil, water conservation and plantation work on the Gram Van (leased land). 27479 saplings of Acacia nilotica, Acacia leucophloea, Ber, Neem, Shisham species were planted but only Acacia nilotica and Acacia leucophloea have survived. In addition to the trees,

many rootstocks of shrub species like caparis decidua etc. were regenerated due to protection. Grass spp. of Cenchrus ciliaris, C. setigerus were enriched. Over a decade, the allotted revenue waste land has got converted into dense vegetation comprising of planted and natural trees, shrubs (Caparis decidua), legumes (Cassia spp.) and grasses. In addition to the increased biomass production from 0.5 mt./ha./yr. to 4mt./ha./yr., the regenerated wasteland is able to meet the fodder requirement of animals for a month in normal rainfall years.

#### Issues

From the very beginning, the governance of the TGCS was done by the nine member managing committee. A section of the villagers whoopposed the TGCS work duringthe initial years opted out of the membership of TGCS. This section included the shepherd community who were denied grazing rights in the TGCS plot in the initial 5 years. At the same time, owners of large ruminants were allowed to graze their animals in the TGCS plot. Resentment at this discrimination soon surfaced and caused intra village conflicts.

#### Remedial Measures

After holding discussions on the problems faced by the villagers, the TGCS plot was selectively opened up for small animal holders (sheep/goats) from 1999 onwards. The pricing system was based on a unit of cattle, and gradually kept declining from Rs.50 per animal to Rs.10 for a cow/buffalo and Rs5 per sheep/goat. This benefited the poorer families. Due to limited resources, high animal population, recurring droughts since 1999, the grazing period was reduced to 20days.

The successful management of common lands by the TGCS has boosted the confidence of the people and motivated them to take care of the rest of the common land and water resources. Realizing the need to take up more common land conservation and development to meet the village fodder requirements, the community approached different agencies for assistance. Thus an NGO - Indian Institute of Rural Management (IIRM) undertook watershed work in the remaining commons and has also constructed water harvesting structures to store rainwater. A system of regulated grazing on a rotational basis has been adopted to maximise biomass production by ensuring a rest period and succession of species on different patches.

#### **Picholia TGCS**

The village Picholia is situated 35 KM towards the north west of Ajmer, located on the fringe of the semi arid Thar Desert of Rajasthan. The village is heterogeneous in terms of caste and has six hamlets. There are in all 918 households with a population of 5934 comprising of 591 OBC, 225 SC, 20 ST and 154 general caste families.

The land resources include 205 ha. of revenue wasteland, 33 ha. of grazing land, 284 ha. of forestland and 110 ha. of private pool land meant for animal grazing. The area under rain fed farming is 1240 ha. with only 464 ha. of irrigated land. The livestock population comprises of 2415 cows/buffaloes and 3938 sheep/goats.

The main Kharif crops are jowar, bajra, pulses and Rabi crops are wheat, barley and vegetables. The Kharif crops are largely rain fed and Rabi crops are irrigated mainly through private wells. During the drought periods animal husbandry is a critical source of livelihood. The recurring drought situation has significantly depleted the ground water and over a decade the water table has gone down to more than 100 feet from 40-50 feet.

#### A Unique Situation

Management of common pool land is a peculiar feature in this village. 110 ha. of private land was purchased in 1961 from a landlord through equal contribution by all families of the village to be kept exclusively for grazing of cattle. The land was registered in the name of eleven caste leaders (Patel) and over time the ownership has passed on to 41 inheritors of the original 11 Patels. The villagers perceived the danger that this patch of land might become **private property** of these families. So the village leaders decided to keep the land as a common resource for the village and appealed to the community for support in regeneration of this common land. The village leaders approached NTGCF and this marked the beginning of the society for the development of common resources of the village.

After deliberations and discussions with the community, a TGCS was formed in 1991. Initially the TGCS had only 135 households as members. At present the enrolment has increased to 685 households (75% of total HH). Efforts are on to persuade caste leaders to ensure 100% membership from their groups.

#### Initial Project Interventions and Results

The villagers volunteered to regenerate 80 ha. of common land through TGCS in three phases - 20 ha. each in 1991 and 1993 and 40 ha. in 2002 .The land was degraded, the soil being sandy and prone to water and wind erosion. Fencing of the site was done with vegetative barriers (Saccharum munja and P. Juliflora.). Simple, scientific and people oriented technology was adopted for soil conservation like arresting rainwater runoff through contour bunds and trenches.

The plantation was done with 52,597 sapling of various fodder tree species like A. nilotica, Ailanthus excelsa, A. leucophloea, Ziziphus Spp. Enrichment of soil by seeding of grass species and protection of natural trees and bushes have enabled the degraded land to develop into dense vegetation. Two hundred and forty five

members have also planted 48,595 saplings of fodder tree species on their farmland to meet their fuel wood and fodder needs.

The farmers owning relatively more private land have dairy farming as a complementary activity. The fodder needs of milch animals are fulfilled essentially through private land and these farmers do not rear much sheep or goats. Hence the marginal and landless farmers depend more on the common land. Around 110 marginal and landless families, who rear sheep and goats for their livelihood, are largely dependent on green leaf fodder for six months in a year. The TGCS plot provides leaf fodder for at least 2- 3 months in a year (2759 Ailanthus trees in the TGCS are lopped every year and this leaf fodder has high nutritive value).

#### **Issues**

The common land is owned by all the families residing in the village. But in TGCS more than 50% of the families were excluded from formal membership and hence no legal ownership on the resources was created.

Though there was no discrimination between a member and non-member in the distribution of low value produce like grass and fuel wood, there was an apprehension that non-members may be excluded from high value products like timber or from income earned from sale of final produce in later years. So it was felt necessary to enroll all left out families as formal members of the Cooperative.

#### Remedial Measures

The FES team persuaded the community to enlarge the membership of TGCS by making individual contacts with non-member families, motivating leaders of caste groups/shepherds, the management committee and the general body. Each caste leader along with the management committee members was made accountable to enroll new members. As a result, the membership has gone up to 75%. In the initial years, a few shepherd families availed of leaf fodder from the common land by paying money on a per tree basis that was lower than the market price. The people who availed of tree fodder also took the branches for fuel wood purpose. This process resulted in the deprivation of the poor and landless families of much needed fuel wood. The village assembly therefore resolved that the members could avail of only leaf fodder and twigs would be left at site. The firewood in the form of twigs would be distributed free of cost on a head load basis and no one would be allowed to take twigs by tractor trolley / bullock carts. The higher caste and economically well-off people never send their women to fetch fuel wood on head and therefore this system gave ample opportunities to the women from poor and needy families to avail of fuel wood.

Around 147 families (General caste - 32, OBC - 83, SC - 32) derived benefits from this revised scheme. The village Gram Sabha decided to restrict lopping to 100 trees per family. This revised system enabled 52 shepherd families to avail of fodder in 2002-03. A nine-member management committee having representation from all caste and user groups managed the activities of the society. The NTGCF has promoted participation of women members and users. It has been observed that women members, from the beginning have actively participated in planning, implementation and monitoring of TGCS activities.

All important decisions relating to protection of common land, benefit sharing, pricing of produce, conflict management and fund use are discussed and approved by the general body. The strength of the society lies in its ability to govern on the basis of local traditional system rather than the restrictive cooperative byelaws. By sharing the produce generated from common land at a reasonable price, the society has generated enough funds (Rs.1,60,155) to meet recurring expenses. An amount of Rs 40,000 from the accumulated funds has been contributed towards the construction of a village hospital and an interest free loan of Rs.30,000 has been given to the Gram Panchayat to purchase fodder and supply it to villagers to cope in the drought period till the onset of monsoon.

#### **Udaipur Kalan TGCS**

Udaipur kalan village is situated 25 kms. from Ajmer on NH 8. This is a relatively small village of 160 families (population of 815) of backward castes comprising of 125 OBC, 14 general castes, 17 SC and 4 ST families. Two hamlets with 48 families of Gurjars (shepherd community) are located near the TGCS plot while the main village is 2 km away from TGCS site.

The total geographical area of the village is 1574 ha. with a sizable area of common land - 307 ha. is grazing land, 375 ha. is revenue wasteland and 204 ha. is forest land. This amounts to 70% of the total area. Besides agriculture, artisan work (painting) and employment in the marble industry in the nearby town of Kishangarh are the major sources of livelihood.

The Gurjars residing in the hamlet depend largely on farming, dairying and sheep/goat rearing. The topography is undulating and rocky and small scale quarrying activity (illegal) is undertaken by some families to supplement family income. The livestock comprises of 408 cows/buffaloes and 1593 sheep/goats. The ratio of big ruminants to small ruminants is 1:4. The village infrastructure includes a primary school, TGCS and electricity. The village has a credit society that has been operational for the last thirty years. It has been working well in catering to the needs of people for agriculture and social functions by providing loans.

#### Initial Project Interventions and Results

The common land of the village is less productive with sparse vegetation and so there is shortage of fodder despite availability of land. A TGCS was formed in the village in 1992. The two major incentives for the formation of TGCS were to meet fodder needs and to stop illegal mining on the common land. The TGCS was leased 40 ha. of revenue wasteland in 1994. Plantation of fodder trees and seeding of grass species were undertaken with 30,610 saplings and 280 kgs. of seeds. Due to the rocky topography only a third of the planted trees survived but the grass productivity went up to 3.5mt/ha/yr. The TGCS work generated 9581 wage days of which 95% was availed by women.

#### **Issues**

The TGCS membership was limited to families residing in the main village and it ignored the two hamlets that were more dependent on the leased land for grazing their animals. The management committee was not properly represented from the user groups and weaker sections of the hamlets. Decisions relating to protection of common land and produce sharing were taken in the main village by the management committee members with very little participation from the shepherd community residing in the dhanis. With the objective of maximizing income from leased land, the management committee auctioned grass from the common land to only one or two persons from the main village for three to four consecutive years.

Slowly the protection system broke down. Though the TGCS appointed a full time watchman, the management had little control over the situation. The hamlet/dhani people and those from the neighbouring villages allowed their animals to graze on TGCS plot for most of the year affecting the survival and growth of plants. This situation led to conflicts between the main village and dhani people and threatened the sustainability of the institution.

#### Remedial Measures

In a democratic system of governance the most important structural aspect is membership. In common property resource management, membership should be perceived as de-facto. The inclusion provides space for representation as well as participation in decision-making processes.

On this principle, the team persuaded the community to enroll all left out families, especially the user groups and weaker sections, as formal members of the society. As a result 100% of the user families and 90% of the rest have become members. Enrolling members by itself does not ensure their representation and participation in decision-making processes.

Restructuring of the management committee to better represent all sections was also done with the aim of involving reputed village leaders in the governance of TGCS. Efforts were also made to systematically establish the supremacy of the general body where all matters of importance relating to resource protection, produce sharing, pricing of produce, conflict management, fund use etc. are placed for discussion and approval.

To provide access to shepherd community and needy villagers, the auction system was abolished and mechanisms for distribution of grass on per animal basis were put in place. The pricing of produce was kept low so as to provide access to poorer families. The rate of grazing on TGCS plot has been kept at Rs.19/- for cow/buffalo and free grazing for sheep/goat. This system is running smoothly for the last three years. The TGCS is also able to meet the recurring expenses and has a surplus fund of Rs.25,000. There is also greater cohesion among communities in the main village and hamlets.

#### **Chakwa TGCS**

The village Chakwa is located 85 kms. from Ajmer town on the highway to Kota. It is a remotely located village with poor infrastructure facilities. This is a small village with 130 households (population of 650). There are 43 SC and 48 OBC families.

The farming community is marginal. The total geographical area is 1292 ha of which 149 ha is grazing land and 182 ha is revenue wasteland. The well water as well as the ground water is saline. There are four ponds and sixty private wells in the village and agricultural productivity is moderate.

The livestock population comprises of 1292 cows/buffaloes and 1278 sheep/goats. Dairying and animal husbandry are the main occupations in drought years, supplemented by wage employment outside. The SC community (25% of the households) goes to the nearby town of Sarwar for seasonal wage earnings from winnowing of cotton. The wage rate within the village for seasonal agricultural work is much lower than the minimum wages. Sheep/goat rearing is an important occupation of these communities and hence they are more dependent on the village commons. Ten shepherd families having herd size of above 100 each migrate to neighboring states.

#### Initial Project Interventions and Results

Due to the saline nature of the land, the village commons produced little biomass and there was shortage of fodder. The Chakwa TGCS was formed to arrest further degradation of common land, to regenerate it to meet fodder requirements of the village and to check the threat of privatization of this resource. Forty hectares of land

was given to the TGCS on lease that was highly saline and only Acacia nilotica, Prosopis juliflora survived. The soil salinity gradually reduced due to soil and water conservation. The site was enriched with seeding of grass species. The total biomass production went up to 2.5mt/ha/yr.

#### Issues

When the TGCS started producing grasses, the management committee decided to allow only cows/buffaloes using the logic that traditionally bullocks have been allowed to graze first on the village commons. This system continued for some years. The shepherd community was not happy to be excluded from the grazing rights on village commons since they had access to this land prior to TGCS formation. This created conflicts and affected the governance of TGCS.

#### Remedial Measures

Though the leased land de-facto belongs to all, around half the families were not formal members of society. The management committee did not take much initiative to enroll left out households and it also failed to handle conflicting situations. Women members from the SC community are vocal and would participate in the decision making process if a platform was provided to them.

The FES team pursued this matter in different forums including the TGCS management committee meetings, group discussions with women, talks with male members and caste leaders and in Gram Sabhas. As a result, 85% of the total households including males and females were enrolled as formal members of the Cooperative Society. All matters of importance are now discussed and approved in general body meetings and the management committee has been made accountable for the timely execution of the decisions taken by the general body.

After some persuasion, the TGCS plot was opened for grazing of sheep/goats. The price, on a per animal basis was kept low (Rs.5/animal) so as to allow the poor to avail of fodder. Despite the low biomass productivity, the TGCS has accumulated an amount of Rs.20, 000/- after meeting the annual recurring expenses.

This year, due to the drought conditions, the amount has been utilized for the purchase of fodder on a truckload basis and the fodder has been distributed to all families as per their requirements. Till date five truck loads of fodder had been distributed and this would be continued till the onset of the monsoon.

The society is fulfilling its objective of meeting the fodder needs of the community. This system has been in practice for the last three years and accessibility to resources by more families has led to a greater sense of ownership and social cohesion towards the institution.

# Section III Emerging Trends and Issues: Common lands Development in Central Aravalis

This Paper documents the lessons learnt from the experiences of the past 15 years of working in Ajmer and Jaipur districts of central Aravalis. The process by which this has been done has included a strategic shift in organizational structure and focus of FES in 1996 and the various reviews since 1998 for Ajmer projects. This has been outlined in section 1 of this Paper. We should place our project experience in a larger context – spatially/regionally and in context to contemporary macro economic and social issues in central Aravali region. This section documents the learnings from the experience of FES in common lands development, for wider dissemination and peer review and for developing effective strategies for future projects.

In terms of land use, revenue wastelands constitute a vast land resource that has the potential for being put to more productive use under community management. Development of common lands has been in the limelight since the early 1970s and various researchers and scholars have drawn attention to the importance of common lands in the rural livelihoods of the poor and marginal farmers. The major reasons for this are:

- Only in the dry, arid and semi arid regions does one find large tracts of common lands which have not been privatized;
- Livestock is of great importance in the rural economy and in the household economy of small, marginal and landless farmers; and
- → There is limited potential for a green revolution type of agricultural development or poverty reduction strategy in this region.

The initial efforts started in the early 1970s, with the Forest Department undertaking a Social Forestry project on revenue lands. Then NGOs began implementing projects on common lands development in India

since the mid 1980s. Most NGOs in India worked on the village grazing lands (called charagah in Rajasthan) that were under the village panchayat while, FES in Rajasthan, worked exclusively on the revenue lands that belonged to the Revenue Department during this period.

The **experience on common lands development** is now sufficiently extensive, especially in Rajasthan which has the largest area ofcommon lands (compared to other states of India). Issues in common lands development have been studied under other larger paradigms including developmental frameworks, watershed development, joint forest management programmes, rural livelihoods and rights based approaches.

FES is one among many NGOs in Rajasthan which has been working on natural resources development and where the work done has been on a significantly large scale and rich experience has been gained. FES has attempted to integrate learnings from common lands development with rural livelihoods issues and tried to develop more rigorous frameworks, taking into account ecological, institutional and economic aspects.

#### Common Lands Development in Semi Arid and Arid Rajasthan

Any work on natural resources development in Rajasthan is always done in the backdrop of dry land farming systems, livestock as a major livelihood source, regular and sometimes severe droughts and the dependence of marginal farmers, landless and poor sections on more than one source of livelihood. The village community is not a homogenous entity and the limited agricultural based livelihood options force larger sections of the village community (and more so in drought years) to migrate for wage labour every year.

## Experience in Common Lands Development Work in Central Aravali Districts

Several NGOs in Rajasthan have many years of intensive work experience in common lands development. The experience gained from FES projects will hopefully add to this knowledge and contribute to further discussions and resolution of outstanding concerns.

The composition of common land in the central Aravali districts of FES projects shows that 16% of the land is classified as revenue wasteland, 14% as village grazing land and 6% as forest land. The forest has sparse vegetation and less species diversity. The common land is highly degraded with few trees and has only scrub type of vegetation. Grass production in the village pasture is only 0.5mt./ha./yr. Only

19% of the land is irrigated through private wells. In good rainfall years farmers manage to harvest two crops- jowar, bajra, pulses, groundnut in Kharif and wheat, barley, mustard, gram in Rabi. They are self-sufficient in meeting their food grain and fodder requirements during the good monsoon years.

Animal husbandry is the next best occupation of 63% of the households (24% of them are landless and marginal farmers whose livelihood is fully dependent on animal husbandry). Estimates show that dairy and animal husbandry contribute to almost 60% of household incomes.

The work done by FES on common lands development provides us with the following **two general conclusions**:

- Project interventions on local governance of natural resources are more likely to succeed in small villages with a more or less homogenous caste and class composition and in areas where the economy is essentially subsistence oriented or forest dependent.
- Problems encountered on sustainability and equity issues surrounding common lands development interventions in central Aravalis, could be due to hierarchical socio-economic relations that exist in the area or could have possibly emanated from the project or due to interplay of both.

Conclusions derived from the case studies:

- → People form a collective unit when there is a common interest and the cohesion is usually triggered by a collective need. This could be in the form of short-term gains in wage employment, increased benefits from fodder and grazing after the project is successful or it could be a shared vision or ethics on a long-term basis.
- Village commons that serve the interests of only one section of the community cannot sustain in the long run if democratic norms are not adopted. Damage and destruction of resources as well as the institution is inevitable unless prevented by coercion.
- → For fair governance, establishing collective choice rule is important. This means that the users affected by the decisions should have the right to frame and modify rules (Bhatiyani TGCS). It explains an important reason for weak governance.
- → The limited resources and intense competition for the same (high pressure on common lands) can result in existing caste divisions getting manifested in increased tension and conflicts over management of common lands, as witnessed in Pinguin village.

- → The governing body should be well represented, fair and have credibility within the village. The governing body is susceptible to influence, given the various caste and class divisions in a village, electoral politics and the use of money and muscle power. Therefore by ensuring that the village general body/Gram Sabha is the ultimate body where important matters concerning TGCS are taken one can ensure safe governance.
- Rules and the distribution system for sharing benefits should not be such that the poor are excluded. Almost all villages witnessed the alienation of the shepherd communities and small livestock holders due to their being denied access to common lands and fodder.
- → The pressure of encroachment of common lands is a big incentive for people to volunteer for the project and then enclose the available common lands. This pressure however continues to remain even after the project interventions are over.
- The degraded status of available common lands e.g. saline soils, sand dunes and rocky soils coupled with the location of common lands in patches in remote corners bordering other villages or forest areas creates severe constraints in representative and effective management of common lands in central Aravalis. .
  Both the internal and external factors sometimes work independently or together to disrupt a successful TGCS.
- → Given the physical and social constraints in developing degraded common lands in semi arid western India, common lands development project support is needed for much longer than the conventional 5-year project life of watershed development projects. The biomass growth potential should also not be overestimated.
- Controlled grazing (controlled implies grazing after grass seeding and the onset of rains in September/October, and without any cutting of trees) in developed common lands is an unavoidable outcome where land quality is poor and produce is not enough to be cut and carried. There is a danger of this system becoming a permanent feature and open grazing replacing controlled grazing.



### Macro trends and issues: Development, Livelihoods, Gender, Ecological concerns

The **state of Rajasthan** covers an area of 3,42,,000 sq. kms. correctedand is now the largest state in India. It is administratively divided into 6 subdivisions, 32 districts, 241 tehsils/blocks 9,189 panchayats and 37,889 villages. According to the 2001 census, the state has a population of 5.65 crores with a 77% rural population that has remained constant since the 1991 census thereby highlighting the significance of rural areas. The sex ratio declined from 918 (females per 1000 males) in 1981 to 909 in 1991 and then recovered to 922 in 2001. Population growth rate has been virtually the same since 1991. The **literacy rate** is 61% with female literacy lower at 44.34%. Rajasthan has a higher IMR than the Indian average and a lower per capita income.

Macro state level trends in Rajasthan show a drop in per capita Gross State Domestic Product (GSDP), from 4% per annum during the 1980s to 3.6% per annum in the 1990s. Indicators of food security show a worsening trend in both malnutrition and calorie intake. Figures of poverty reduction are contested and threaten to undermine social security and welfare expenditures in the coming years. The trends in Rajasthan are matched by national trends wherein the annual rate of growth of rural employment declined to 0.66% during 1994-2000 as compared to 2.03% during the period 1988-94. The annual growth rate for rural employment during 1994-2000 was less than half of the rate of growth for the rural labour force in the same period. The national annual rate of growth of urban employment also fell, from 3.39 per cent during 1987-'88 to 1993-'94, to 2.27 per cent during 1993-'94 to 1999-2000.

**Development trends specific to Rajasthan** show significant changes in land use, water, cropping patterns and livestock, mining and manufacturing. There is a distinct **land use change** in favour of expansion of dry land agriculture at the expense of other types, and an

intensification of irrigated farming. As a result, the increase in Net Irrigated Area has been greater than the increase in Net Sown Area (NSA). Thereby resulting in a greater depletion of the available water resources. This has been accompanied by a decline in farm size and an increase in agricultural labourers.

A change in the cropping pattern with more oilseed and cash crops has resulted in a reduction in available crop residue and fodder. Surplus food grain and production of cotton and oilseed crops is predominantly in the canal-irrigated areas of IGNP and Chambal projects and a few districts of eastern Rajasthan. This tends to give a false impression, that Rajasthan is self sufficient in food grain production and that the marginal and small farmers have diversified into oilseed production in a big way. The period 1994-99 witnessed a high growth rate of 4.32% per annum in agriculture production. Net irrigated area in the state increased from 29.8 lakh hectares in 1981 to 56.1 lakh hectares in 2000. Out of the total increase in irrigated area of 26.3 lakh hectares 34% was allocated to wheat, 43% to rapeseed and mustard, and the rest towards other cash crops such as cotton, spices, fruits and vegetables and medicinal crops. An important trend has been that the variation in agriculture production has increased in the 1980s and the 1990s as compared to the earlier two decades.

Livestock remains a major livelihood option in Rajasthan, although the shift towards more buffaloes could be due to the inability of the marginal and small farmers to sustain cattle. The success of the dairy sector I Rajasthan is attributed to increased milk production. It needs to be verified whether the increase in milk sales in Rajasthan (that has been also witnessed in drought years), is due to the success of the livestock development and breeding programmes or is a result of distress sale. The livestock composition was changing in favour of smaller no it is small livestock ruminants till the mid 1980s. The drought conditions in the latter half of the 1980s led to large scale mortality in livestock, and the small ruminants (goats) have once again forged ahead in numbers.

The semi arid and arid environment of Rajasthan makes livestock based farming a reliable livelihood option. Livestock plays a significant role in the national and the state economy of Rajasthan. While contribution of agriculture to the national GDP declined during the 1980s, the share of livestock in the GDP increased from 5.7% in 1980-82 to 6.1% in 1995-96. The share of livestock in the total agriculture production for India is estimated to have risen from 19% in 1980-81 to 30% in 1990s<sup>1</sup>. For Rajasthan, livestock contributed 9% of the State Domestic Product<sup>2</sup>. Some estimate the contribution of the livestock higher at 20% of the state income.<sup>3</sup>

World Bank, 1999, Livestock Sector Report, India.

<sup>&</sup>lt;sup>2</sup> Economic Review 2002-3 Govt. of Rajasthan.

<sup>&</sup>lt;sup>3</sup> SDC and IC; Workshop Proceedings on Possible Livestock Focused NRM Project in West Rajasthan, 1999. The 1998 Rajasthan Breeding Policy mentions livestock contribution as 19% of the state net domestic income.

**Groundwater estimates reveal a dangerous situation**. Over a short three-year period, from 1998-2001, it was reported that the groundwater declined in 26 of the 32 districts, at rates ranging from 1.66 meters to 8.66 meters. Groundwater extraction is 103%. Over exploited groundwater blocks doubled in 2001 as compared to 1998.

In the above macro context, **development of common lands in Rajasthan still remains a challenge**. The challenge is not so much in technical and programming areas (although experience shows that shorter project cycles cannot deliver in regular drought and semi-arid conditions) but more in ensuring equity and local institution building. **The rural poor continue to depend on common lands.** The importance of common lands in the livelihoods of the poor (for firewood and fodder availability) and from an **environmental consideration** (as its degradation affects ground water tables and agricultural production) was always identified as a major reason for initiating development of this resource. The above conditions have not changed during the two decades because of the following: - pressure on common lands has increased, encroachments are a major issue, rural livelihoods have become more vulnerable, rural non farm sector employment growth has become sluggish, and droughts over the past five years (1998-2003) have inflicted a staggering loss on livestock holding and meager assets of the rural poor.

# Specific Experiences from Common Lands Development in Ajmer and Jaipur Districts

Within the state of Rajasthan, the extent, quality and distribution of common lands varies a great deal. It may not be possible to draw a conclusion from the FES project experiences in three districts of central Aravalis for the whole of the state, yet it is important to document the major learnings.

The status of common lands (in Ajmer and Jaipur) can be summarised as follows:

- The size of common lands is dwindling and there is increased pressures from encroachments and privatisation. These lands continue to face degradation even after they are privatised as they are often left uncultivated with little investment for increasing their productivity.
- → The available common lands in a village are scattered in several places and are often at the boundaries of other villages. They are often of poor quality (stony, hilly or sandy), demand heavy investments and require a longer gestation period for development (more than the standard five years for a typical watershed development project).

- → Common lands are severely degraded and produce as little as 0.5 tons/ha./year of poor quality fodder. Developed common lands produce a significantly higher fodder yield of 3 to 4 tons/ha./year. Given the high demand for fodder, the increased amount of fodder available from developed common lands is only sufficient to meet a few months of the fodder requirements. Nevertheless, it meets some of the most critical fodder needs of the poorest sections.
- → The relatively smaller area of these revenue lands and village charagahs, their location, and the intense pressures of grazing and encroachment create a big challenge for investing, regenerating and sustaining these resources. It leads to a situation where the cost for a village community, to protect and regenerate such common lands in an equitable and participatory manner, is very high and risky. Rural livelihoods relying on dry land agriculture are becoming more insecure. Subsistence nature of livelihoods and the traditional way of managing local resources are consequently breaking down. Along with these, the increasing migration and corruption in public life also result in the neglect of common lands. Commonlands are therefore no longer a a development priority for most donor agencies. NGOs in Rajasthan have also not been able to demonstrate the significance of benefits arising from common lands development, in a forceful manner.

It is observed that both the investment and maintenance of developed common lands in Ajmer and Jaipur districts of Rajasthan face severe constraints. The required investment per hectare is higher than the standard watershed norms, the time for regeneration is longer and the cost of maintenance too is higher.

Given the above description of problems in regeneration of common lands in Ajmer and Jaipur, there are **three conclusions that can be drawn**:

- 1. The economic cost of regeneration of common lands is not justifiable from a purely financial point of view of input and output. The increased productivity of dry fodder, leaf fodder and fuel wood from common lands alone will, in most cases, not justify the investment made (at least Rs.7000/ha). There are no ways to measure and verify the impact of groundwater recharge in a village solely from the watershed development work done on a small patch of common land. If we can put a monetary figure to the groundwater recharge, contribution to agriculture diversification and increased productivity, we may be able to justify investments on common lands in at least a few instances.
- **2. Investment in common lands development can be justified** if we apportion a higher **value** to Equity considerations(to benefits derived by the poorer sections of the village community (from an entitlement point of view), to the **ecological value**

of the conserved resource and to **community participation and empowerment** achieved in managing the common land.

3. Sustainability of developed common lands in the central Aravalis (Jaipur and Rajasthan) may have to depend on some level of subsidy. It would be too much to assume that the protection and maintenance of the degraded and contested common lands would be taken care of through peoples' participation in all cases. The donors and the government should take a serious look at the protection and maintenance of developed common lands for the sake of the equity, ecological benefits and the larger impact on groundwater recharge. The state government should make small provisions from its many developmental schemes for the protection and maintenance of a developed commonlands, else the large-scale investment would go waste.

#### Common Lands Development - Emerging Issues

Future common lands development work needs to be reviewed in the contemporary context of the political economy of the region/Rajasthan. This can be further broken into the household and regional context of development and deprivation and in relation to other sectors of the state economy and social sector investment. Rural livelihoods approach and Rights Based Approach are being increasingly advocated for development programming by many donors these days.

## Some of the immediate considerations for taking up common lands work in a larger context include:

- Drought proneness of central Aravalis, and the impact of the recent droughts;
- ★ Increasing vulnerability of dry land farming based rural livelihoods;
- → Debate on farm versus non farm based rural livelihood options;
- → Advent of PRIs Panchayat Raj Institutionsas local institutions, and the role of other village institutions; and
- ✦ Recent state policies relating to water, minerals and livestock that have a direct bearing on common lands development.

#### Potential Issues and Research Priorities

The impact of common lands development is most directly felt in the bio physical improvements in soil and water ecosystems, and their impact on agriculture and livelihoods. The impact on equity, peoples' participation and empowerment are more difficult to define and measure. Given the fact that watershed development

today is the largest government sponsored anti-poverty project, it becomes imperative to consider how such an important programme can be made to serve fundamental social goals of equity, participation and empowerment.

It is up to each development agency to determine priority research areas and plan interventions for common lands development in the years to come. Better quality of research and sharing through networking will be required. The agenda for common lands development will have to be redefined incorporating larger concerns and practical action points.

In the present scenario, there are some specific aspects that need follow up and research in common lands development in Rajasthan:

#### Livelihoods Aspects

- Livestock changes and its significance in rural livelihoods for different sections of farming community.
- → Rural employment trends and surplus labour, identifying policy options for engaging them in development and maintenance of CPRs.
- → NTFP as an income generation option in semi arid western India constraints and opportunities.
- Changing rural livelihoods and the relevance of common lands development. Increasing migration and changing rural livelihood trends and patterns and their implications for common lands, if any.
- Feasibility of micro-credit as a complementary intervention along with common lands development focused programmes. Replacement of the formal sector credit by informal sector credit and capital being drained out of rural areas to more lucrative investments.

#### Social, Gender and Equity Considerations

- Participation political versus administrative decentralization. PRIs, constraints and opportunities in management of commons – expectations and reality.
   Common lands development as a facilitator in establishing democratic governance and norms.
- → Traditional village institutions/ systems and more tolerant social norms those that are favourable and those which are regressive (e.g. mixed religious practices of Cheeta Mehrat community) for common lands development.

- → Appropriateness of promoting religious and sectarian values for the development and protection of common property resources as a programme strategy.
- ★ Whether drinking water should be an integral complimentary component of any NRM intervention in arid and semi arid western India.

#### Sustainability

- ★ Common lands use status in Rajasthan revenue and charagah lands.
- → Impact of drought on common lands development, the impact of the past 5 drought years on the peoples priorities and concerns relating to common lands regeneration
- → Identifying indicators for measuring the impact of common lands development on social and ecological areas.
- → Identifying the single most important physical indicator of successful common lands development in semi arid central Aravalis, given all the physical limitations of the degraded and fragmented resource.

